

TO: Fort Wayne Senate
FROM: Educational Policy Committee
DATE: November 18, 1994
SUBJ: School and Program Mission, Goals, and Objectives Statements
DISPOSITION: To the Presiding Officer for implementation

WHEREAS, The Steering Committee for Assessment of Student Academic Achievement (SCASAA) has proposed the further amendment of SD 93-10 as described in the attached memo, and

WHEREAS, The Educational Policy Committee has recommended approval of the mission, goals, and objectives statements provided for Computer Science, Electrical Engineering Technology, and Radiography,

RESOLVED, That the Senate approve the proposed additional amendment to SD 93-10 as recommended by EPC.

INDIANA UNIVERSITY
PURDUE UNIVERSITY
FORT WAYNE

Office of the Vice Chancellor
for Academic Affairs
(219) 481-6805

TO: Fort Wayne Senate

FROM: Steering Committee for Assessment of
Student Academic Achievement (SCASAA)

DATE: October 28, 1994

SUBJECT: School and Program Mission, Goals, and Objectives Statements

DISPOSITION: To the Chancellor for Implementation

Be it resolved that SD 93-10, approved December 13, 1993, and amended April 11, 1994 (SD 93-27), be amended further by the addition of the following program mission, goals and objectives statements:

Arts and Sciences
Economics-BA

Engineering, Technology, and Computer Science
Computer Science
Electrical Engineering Technology

Health Sciences
Radiography.

Approving
G. Cavanagh
E. Cowen
R. Cochren
J. Fellers-Hook
K. Johnson
E. Leonard
D. McCants
R. Pacer
C. Steinhaus

Disapproving

Abstaining

COMPUTER SCIENCE

Mission and Goals

The Department of Computer Science is responsible for curricula and courses related to computing. It offers baccalaureate and associate degree programs, as well as minors and certificates, in the disciplines of computer science and information systems. It also is responsible for general education and service courses focusing on the use of computers.

Goals for Bachelor of Science in Information Systems

Graduates should

1. understand the fundamentals of the discipline of information systems: programming, data structure design, business data processing, computer organization, computer architecture, data communication, and database systems;
2. have experience and facility in problem solving and be able to apply the principles of software engineering to software development; and
3. be prepared for entry into the computing profession or for graduate study.

Goals for Bachelor of Science in Computer Science

Graduates should

1. understand the fundamentals of the discipline of computer science: programming, data structure design, computer organization, computer architecture, data communication, programming language design, algorithm analysis and design, operating systems, and numerical analysis;
2. have experience and facility in problem solving and be able to apply the principles of software engineering to software development; and
3. be prepared for entry into the computing profession or for graduate study.

Goals for Associate of Applied Science in Information Systems

Graduates should

1. understand the fundamentals of the discipline of information systems at this level: programming, data structure design, business data processing, computer organization, computer architecture, and data communication;
2. have experience and facility in problem solving and be able to apply the principles of software engineering to software development; and
3. be prepared for further study in the information systems baccalaureate degree program or entry into the computing profession.

Goals for Associate of Applied Science in Computer Science

Graduates should

1. understand the fundamentals of the discipline of computer science at this level, programming, data structure design, computer organization, computer architecture, and

data communication;

2. have experience and facility in problem solving and be able to apply the principles of software engineering to software development, and
3. be prepared for further study in the computer science baccalaureate degree program or entry into the computing profession.

Goals for Certificate Programs in Computer Science

Students in the certificate programs will be expected to complete training in specialized areas within the computing discipline. The certificate is acknowledgement of this specialized training and has goals peculiar to each program.

Certificate in Programming

The student should be able to apply skills of programming and data structure design to implement software.

Certificate in Data Processing

The student should have an understanding of the mechanics of the business data processing function from the view of a programmer.

Certificate in Computer Architecture

Students should understand the basic organization, architecture, control and communication of computer hardware.

Certificate in Database Systems

Students should be skilled in the fundamentals of design, analysis and implementation of database systems.

Certificate in Software Engineering

Students should be able to apply the principles of software engineering to the analysis, design and implementation of large systems.

Goals for General Education Courses in the Computer Science Department

Computer Literacy (CS 106)

Students should be computer literate and acclimated to using microcomputer productivity tools.

Goals for Service Courses in the Computer Science Department

Principles of Computing and Program Development:

CS 114, CS 170, CS 203, CS 210, CS 310, CS 226, and CS 326

Students completing these courses should demonstrate sufficient skills in computing and program development as required in their major fields (other than Computer Science)

ELECTRICAL ENGINEERING TECHNOLOGY

Mission and Goals

The department of electrical engineering technology (EET) in the School of Engineering, Technology, and Computer Science, serves the needs of students, industry, and government in northeastern Indiana.

The EET department offers bachelor of science (B.S.) and associate in applied science (A.A.S.) degree programs. Both programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET)

The two-year A.A.S. degree program is a combination of courses in electricity, electronics, mathematics, science, and general academic areas. The program helps students prepare for employment as technicians, and gives them sufficient education to find employment in such fields as communication electronics, industrial electronics, military electronics, computer electronics, automation, electronics servicing, and electrical power. Specialization in these areas is provided by technical-elective courses in the second year of the program.

The four-year B.S. degree program prepares students for a career as a technologist in an electronics industry, a research laboratory, or any industry that uses electrical power or electronic circuitry. The program provides students with advanced study in electrical engineering technology and other courses that provide the foundation of technical and non-technical knowledge which is essential in modern industry.

Laboratory experience is an essential part of the EET curriculum. Both the B.S. and the A.A.S. programs integrate the laboratory with the classroom lecture.

Because most associate degree graduates will be electronic technicians, these graduates will:

- (1) be able to analyze and modify electrical and electronic circuits.
- (2) be able to write, analyze, and modify computer language programs.

Only those students who have received an associate degree in EET from IPFW or another accredited institution may enroll in the bachelor's degree program. The bachelor's degree graduate will:

- (1) meet all of the specific objectives listed for the associate degree program.
- (2) be able to analyze advanced electrical and electronic circuits.
- (3) be able to make experimental investigations and design equipment related to his or her specialty areas.

RADIOGRAPHY

Mission and Goals

The mission for the Fort Wayne School of Radiography Program, School of Health Sciences at Indiana University-Purdue University Fort Wayne, is to educate qualified individuals for careers in radiography. The program is committed to excellence in the theory and practice of radiography. Individuals in this technical science will assume roles in the medical health team by providing essential services including, but not limited to, various imaging modalities such as x-rays, radioactive substances, high frequency sound waves and magnetic fields.

PROGRAM GOALS AND OBJECTIVES

1. The program will endorse and fulfill the "Objectives and Ideals" of Indiana University-Purdue University Fort Wayne.
2. The student will be prepared to function as an entry-level radiographer.
3. The student will demonstrate competence on the American Registry of Radiologic Technologists Radiography Examination.
4. The faculty and students will exercise high standards of radiation protection to reduce unnecessary radiation exposure to instructors, students, patients, and others.
5. The student will be prepared in the knowledge and techniques that will enable the student to assist in procedures involving Computed Tomography, Nuclear Medicine, Diagnostic Medical Sonography, Radiation Oncology, Magnetic Resonance Imaging and advanced Specialized Radiography.
6. The student will practice effective written and oral communication skills to promote a professional demeanor to patients, other health professionals, and the community.
7. The student will develop and demonstrate basic computer skills as they relate to usage in the Radiology department.
8. The student will be prepared to adapt to changes in current trends and to future imaging modalities.
9. The student will develop work habits and behavior patterns required for success and advancement in the profession.
10. The student will be prepared to serve as a resource of information to the community to promote a better understanding of the complex issues involving radiation.
11. The student will recognize the need for continued learning and professional development.